## COMMONWEALTH OF KENTUCKY

## BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2008 JOINT INTEGRATED RESOURCE
PLAN OF LOUISVILLE GAS AND ELECTRIC
COMPANY AND KENTUCKY UTILITIES
COMPANY
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COMPANY
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## FIRST DATA REQUEST OF COMMISSION STAFF TO LOUISVILLE GAS & ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

Louisville Gas and Electric Company ("LG&E") and Kentucky Utilities Company ("KU"), pursuant to 807 KAR 5:001, are to file with the Commission the original and seven copies of the following information, with a copy to all parties of record. The information requested herein is due on or before July 10, 2008. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

LG&E and KU ("the Companies") shall make timely amendment to any prior responses if they obtain information which indicates that the response was incorrect

when made or, though correct when made, is now incorrect in any material respect. For any requests to which either of the Companies fails or refuses to furnish all or part of the requested information, the Companies shall provide a written explanation of the specific grounds for their failure to completely and precisely respond.

Careful attention should be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations.

- 1. Refer to Volume I, Section 8 Resource Assessment pages 8, 69-70. Table 8(3)(d) shows that there are no existing or projected amounts of electric energy or generating capacity from cogeneration, self-generation, or technologies relying on renewable resources or other non-utility sources. If the Warner Lieberman Climate Change Bill (S.2191) or a similar bill had become law, these other sources of generation capacity and energy may have become important new resources.
- a. Provide an explanation of how the Companies would become aware of new generation projects, and are the Companies actively researching potential sources of low carbon emitting generation?
- b. Are the Companies aware of any non-utility generation taking place in their service territories? If so, provide a list of all non-utility generation taking place within their service territories.
- c. Are the Companies aware of any industries that have the potential for self generation or cogeneration that have not yet been developed? If so, are there

any plans to approach these other companies regarding the possible development of such generation?

- d. In Kentucky, there are several small landfill gas projects. Have the Companies considered pursuing similar projects or other relatively small-scale generation projects as future potential sources of power?
- (1) If so, provide a list of projects that have been considered, but were not sufficiently viable to the point of being placed in Table 8(3)(d).
- (2) If not, provide an explanation as to why the pursuit of multiple small generation projects (landfill gas, biomass, hydro or otherwise) is not a viable resource option.
- e. Are the Companies opposed to the idea of pursuing individually small-scale low carbon emitting generation projects or working with other companies in either an advisory capacity or as a business partner to develop potential new supplies of low carbon emitting generation?
- 2. Refer to Volume I, Section 8 Resource Assessment Table 8(4), Table 8(4)-1, and Table 8(4)(a)-2, pp. 8, 84 87.
- a. Provide a discussion and documentation supporting the choice of constructing a 475 MW combined cycle combustion turbine in 2015 and in 2019. What were the generation options that were not selected and why?
- b. Does the potential for future carbon capture legislation play any part in the analysis regarding the selection of specific generation technology? If so, explain how the Companies are integrating the potential costs of carbon capture and sequestration into their resource assessment analyses.

- c. Currently, there appear to be no plans to retire any coal generation units from the coal generation fleet. If the Warner Lieberman Climate Change Bill (S.2191) or some similar form of carbon capture and sequestration law were to be enacted, then:
- (1) Provide an explanation of how this would affect the older coal generation units in the fleet and whether this would lead to the retirement of the units.
- (2) Given the current state of carbon capture and sequestration, provide a discussion of which units would be able to be fitted with the necessary equipment to capture and store carbon.
  - 3. Refer to Volume III, DSM Screening Analysis, pp. 6-9, and Exhibit DSM:
- a. For each of the DSM programs listed on pp. 6-9, provide a detailed explanation of how the estimated annual kWh reductions are calculated.
- b. For each of the DSM programs listed on pp. 6-9, provide a detailed explanation of how the actual kWh reduced will be calculated and verified.
- c. For each of the DSM programs listed on pp. 6-9, explain whether KU and LG&E personnel or third party vendors will be used to verify results.
- 4. Refer to Volume III, DSM Screening Analysis, pp. 6-9, and Exhibit DSM-5 and the Aggressive Green Scenario Section.
- a. Given the assumptions made in the Aggressive Green Scenario Section, explain whether these higher costs would alter any of the cost benefit tests for existing or potential DSM programs, including a more aggressive expansion of existing DSM programs.

	b.	Explain how the assumptions regarding the potential prices of CO <sub>2</sub>
specifically	affect th	e cost benefit tests for the DSM programs.

Stephanie Stumbo Executive Director

**Public Service Commission** 

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DATED <u>June 26, 2008</u>

cc: All Parties